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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/05/2006

Jurgen Linkies

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EXAMINER

ROGERS, MARTIN K

ART UNIT

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1791

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DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,836	Applicant(s) LINKIES ET AL.	
	Examiner MARTIN ROGERS	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, drawn to a device for blown film extrusion.

Group II, claim(s) 13-16, drawn to a method for blown film extrusion.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common technical feature is taught by Rettig et al. (USP 3321563). The common technical feature is a blown film extrusion system ("blowing an extruded film" Rettig Column 1, line 16) which comprises at least a blowing head (Figure 1: 1), which extrudes a film tube (Figure 1: 2), a pinch-off device (Figure 1: 4), which pinches off the film tube (Figure 1: 2), film guiding elements that guide the film tube between its extrusion by the blowing head and its pinching off (Figure 1: 8), said blown film extrusion system being characterized in that the guiding elements contain a porous ("porous" Rettig Column 3, line 25), preferable microporous material, the material being a sintered ("sintered" Rettig Column 3, line 31) bronze ("bronze" Rettig Column 3, line 30) and allowing for the air

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that passes through the pores to exert a force on the film (Figure 1: 8). The groups therefore lack unity of invention.

3. Groups I and II are related as apparatus and method of its use. The apparatus as claimed can be used with another and materially different process, such as one in which the pressure differential between the air reservoir and/or the air supply line is outside of the range of 10 millibars and 1 bar.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. During a telephone conversation with Harvey Jacobson on 12/11/08 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipate by Rettig et al. (USP 3321563).

8. In regards to claim 1, Rettig et al. teach a blown film extrusion system ("blowing an extruded film" Rettig Column 1, line 16) which comprises at least a blowing head (Figure 1: 1), which extrudes a film tube (Figure 1: 2), a pinch-off device (Figure 1: 4), which pinches off the film tube (Figure 1: 2), film guiding elements that guide the film tube between its extrusion by the blowing head and its pinching off (Figure 1: 8), said blown film extrusion system being characterized in that the guiding elements contain a porous ("porous" Rettig Column 3, line 25), preferable microporous material.

9. In regards to claim 2, Rettig et al. further teach that the porous material is sintered material ("sintered" Rettig Column 3, line 31).

10. In regards to claim 3, Rettig et al. further teach that the porous material comprises metallic components such as copper or bronze ("bronze" Rettig Column 3, line 30).

11. In regards to claim 4, Rettig et al. further teach the the porous material is arranged in such a way between the route of transport of the film and/or the film tube and a compressed air reservoir or an air supply line that air escapes through the porous material thereby exerting force on the film ("A uniform flow of the cooling medium in the annular cooling zone surrounding the tubular film can be achieved particularly advantageously by allowing compressed air to escape through a porous material in the direction of the tubular film" Rettig Column 3, lines15-19).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rettig et al. (USP 3321563) in view of Meyer (DE 20309929 note that USP 7025303 is taken to be an english equivalent of the foreign reference and used to make the following rejections).

14. Claims 4 and 5 state that the porous material has a thickness of between 1 and 10 mm and that the material has a thickness between 2 and 5 mm respectively. Rettig et al. do not teach this.

Meyer (USP 7025303) teaches that the porous material has a thickness of between 1 and 10 mm and that the material has a thickness between 2 and 5 mm ("The microporous layer used for forming the surface advantageously has a thickness of 0.5 to 2.0 mm" Meyer Column 3, lines 35-36) for the benefit achieving "a desired fine distribution of air flow" (Meyer Column 3, lines 37-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus that uses a porous guiding element to guide a blown film as taught by Rettig et al. with the feature of making the porous material have the

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thickness disclosed by Meyer for the benefit achieving "a desired fine distribution of air flow" (Meyer Column 3, lines 37-38).

15. Claims 7, 8, and 9 state that the porous material have an average pore size of between 5 and 100 micrometers, 10 and 60 micrometers, and 20 and 45 micrometers respectively. Rettig et al. do not teach this.

Meyer teaches that the porous material have an average pore size of between 5 and 100 micrometers, 10 and 60 micrometers, and 20 and 45 micrometers ("approximately 5 to 100 μm " Meyer Column 3, line 56) for the benefit forming an "extraordinarily even and constant air cushion" Meyer Column 3, lines 30-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus with a porous guiding element to guide a blown film as taught by Rettig et al. with the feature of making the porous material have the pore sizes disclosed by Meyer for the benefit forming an "extraordinarily even and constant air cushion" Meyer Column 3, lines 30-31).

16. In regards to claim 10, Rettig et al. further teach that the porous material is arranged in the region of the calibrations cage and/or pinch-off unit ("annular cooling zone surrounding the tubular film" Rettig Column 3, lines 15-16).

17. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Rettig et al. (USP 3321563) in view of Meyer (DE 20309929) as applied to claim 10 above and further in view of Portoff (USP 5700489).

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18. In regards to claim 11, Rettig et al. teach that the material in the isolation cage be porous ("microporous" Rettig Column 3, line 25) but do not teach that the material is arranged in the region of the calibrations cage with several isolated plates being turned towards the film tube.

Pottorf teaches that the material is arranged in the region of the calibrations cage with several isolated plates ("wear plate 34" Pottorf Column 5, lines 54-55) being turned towards the film tube (Figure 3: Rods 30 are covered with the plates 34) for the benefit of the arrangement of the conveying elements as diagrammed in figure 3 allowing for the calibration cage to have an adjustable diameter ("The frame 16 can be adapted to move the arms 20 in or out to accommodate the size of the plastic film extrusion" Pottorf Column 4, lines 45-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus that uses a porous calibration cage as taught by Rettig et al. with the feature of shaping the cage out of individual plates as taught by Pottorff for the benefit of the arrangement of the conveying elements as diagrammed in figure 3 allowing for the calibration cage to have an adjustable diameter ("The frame 16 can be adapted to move the arms 20 in or out to accommodate the size of the plastic film extrusion" Pottorf Column 4, lines 45-47).

19. In regards to claim 12, Rettig et al. teaches that the calibration cage material be porous ("microporous" Rettig Column 3, line 25) but does not teach that the plates are

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arranged in a staggered position with respect to both the conveying direction and the circumferential direction of the film tube.

Pottorf teaches that the plates are arranged in a staggered position with respect to both the conveying direction and the circumferential direction of the film tube (See arrangement of guiding rods 30 in Figure 3) for the benefit of the arrangement of the conveying elements as diagrammed in figure 3 allowing for the calibration cage to have an adjustable diameter ("The frame 16 can be adapted to move the arms 20 in or out to accommodate the size of the plastic film extrusion" Pottorf Column 4, lines 45-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus that uses a porous calibration cage as taught by Rettig et al. with the feature of shaping the cage out of individual plates that are arranged in a staggered relationship as taught by Pottorff for the benefit of the arrangement of the conveying elements as diagrammed in figure 3 allowing for the calibration cage to have an adjustable diameter ("The frame 16 can be adapted to move the arms 20 in or out to accommodate the size of the plastic film extrusion" Pottorf Column 4, lines 45-47).

Conclusion

20. Note that Pottorf teaches that the plates are hollow so that they can be supplied with cooling air (Pottorf Column 5, lines 23-24), making it easy to adapt them to a porous surface that will use cooling air to directly apply a force to the passing film.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN ROGERS whose telephone number is 571-270-7002. The examiner can normally be reached on Monday through Thursday, 7:30 to 5:00, and every other Friday, 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Crispino/
Supervisory Patent Examiner, Art Unit 1791